AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1 – 27. (Canceled)

28.   (New) A method for performing remote access commands between nodes, the method comprising:

establishing a mutually pre-agreed upon data allotment for a first node and a second node;

detecting an application request in a request queue, the application request identifying a data access task to be performed between the first and second node; and

assigning a context including a set of channel adapter resources of the first node to process the application request to completion of the data access task, the context operating a task manager that tracks an offset for the data access task;

issuing a first request from the first node to the second node, the first request requesting the data access task be performed between the first node and the second node;

receiving, at the first node, a first response from the second node that partially completes the data access task and that contains data in an amount not exceeding the data allotment;

issuing at least one subsidiary request from the first node to the second node to further complete the data access task between the first node and the second node, the at least one subsidiary request based on an amount of partial completion of the data access task between the first node and the second node; and

receiving, from the second node in response to the at least one subsidiary request, at least one corresponding subsidiary response that further completes the data access task between the first node and the second node and that contains data in an amount not exceeding the data allotment;

wherein a new starting value for each subsidiary request is calculated from the offset;

wherein the context is pre-emptible between the first response and a first subsidiary request, and between a subsidiary response and a subsequent subsidiary request, to support other access tasks by the channel adapter performing a context switch.

29.   (New) The method of claim 28 further comprising:

pre-empting the context prior to full completion of the data access task;

issuing a second request from the first node for an other data access task; and

resuming the context.

30.   (New) The method of claim 29 wherein the other data access task is identified by a different application request in a different request queue.

31.   (New) The method of claim 28 wherein issuing at least one subsidiary request comprises:

calculating a remaining amount of data required to complete the data access task between the first node and the second node; and

creating a least one subsidiary request to reference at least a portion of the remaining amount of data required to complete the data access task.

32.   (New) The method of claim 31 wherein calculating the remaining amount of data comprises:

determining a total completed amount of data processed for the data access task by the first request and associated first response and all subsidiary requests and corresponding subsidiary responses between the first and second node; and

determining the remaining amount of data required to complete the data access task as a difference between an initial amount of data specified by an application request and the total completed amount of data.

33.   (New) The method of claim 28 wherein:

the first and second nodes are nodes that utilize channel adapters to exchange the first request and the at least one subsidiary request and the corresponding first response and the at least one subsidiary response;

the application request is a remote direct memory access request for the first node to access data in a memory at the second node; and

an initial amount of data specified by the application request is a total amount of data that the first node is to access in the memory at the second node.

34.   (New) The method of claim 33 wherein the first request and the at least one subsidiary request are read remote direct memory access commands issued by the first node to read data in the memory from the second node.

35.   (New) The method of claim 28 wherein establishing the data allotment comprises:

dynamically determining the data allotment between the first and second nodes based on at least one external data allotment event, such that if the at least one external data allotment event occurs, the first and second nodes change a value of the data allotment.

36.   (New) A communications interface comprising:

a processor;

a communications port; and

an interconnection mechanism coupling the processor and the communications port;

wherein the processor executes logic of a communications interface application to form a communications interface process that performs remote access commands between nodes by performing the operations of:

establishing a mutually pre-agreed upon data allotment for a first node and a second node;

detecting an application request in a request queue, the application request identifying a data access task to be performed between the first and second node; and

assigning a context including a set of channel adapter resources of the first node to process the application request to completion of the data access task, the context operating a task manager that tracks an offset for the data access task;

issuing a first request from the first node to the second node, the first request requesting the data access task be performed between the first node and the second node;

receiving, at the first node, a first response from the second node that partially completes the data access task and that contains data in an amount not exceeding the data allotment;

issuing at least one subsidiary request from the first node to the second node to further complete the data access task between the first node and the second node, the at least one subsidiary request based on an amount of partial completion of the data access task between the first node and the second node; and

receiving, from the second node in response to the at least one subsidiary request, at least one corresponding subsidiary response that further completes the data access task between the first node and the second node and that contains data in an amount not exceeding the data allotment;

wherein a new starting value for each subsidiary request is calculated from the offset;

wherein the context is pre-emptible between the first response and a first subsidiary request, and between a subsidiary response and a subsequent subsidiary request, to support other access tasks by the channel adapter performing a context switch.

37.   (New) The communications interface of claim 36 wherein the communications interface application performs the operations of:

pre-empting the context prior to full completion of the data access task;

issuing a second request from the first node for an other data access task; and

5

resuming the context.

38.   (New) The communications interface of claim 37 wherein the other data access task is identified by a different application request in a different request queue.

39.   (New) The communications interface of claim 36 wherein issuing at least one subsidiary request comprises:

calculating a remaining amount of data required to complete the data access task between the first node and the second node; and

creating a least one subsidiary request to reference at least a portion of the remaining amount of data required to complete the data access task.

40.   (New) The communications interface of claim 39 wherein calculating the remaining amount of data comprises:

determining a total completed amount of data processed for the data access task by the first request and associated first response and all subsidiary requests and corresponding subsidiary responses between the first and second node; and

determining the remaining amount of data required to complete the data access task as a difference between an initial amount of data specified by an application request and the total completed amount of data.

41.   (New) The communications interface of claim 36 wherein:

the first and second nodes are nodes that utilize channel adapters to exchange the first request and the at least one subsidiary request and the corresponding first response and the at least one subsidiary response;

the application request is a remote direct memory access request for the first node to access data in a memory at the second node; and

an initial amount of data specified by the application request is a total amount of data that the first node is to access in the memory at the second node.

42.   (New) The communications interface of claim 41 wherein the first request and the at least one subsidiary request are read remote direct memory access commands issued by the first node to read data in the memory from the second node.

43.   (New) The communications interface of claim 36 wherein establishing the data allotment comprises:

dynamically determining the data allotment between the first and second nodes based on at least one external data allotment event, such that if the at least one external data allotment event occurs, the first and second nodes change a value of the data allotment.